

Prior to examining this application, kindly amend the application as follows:

IN THE CLAIMS

Cancel claims 15, 25-26 and 40.

Amend claims 2-6, 17, 20-24, 28-29, 39, 41, 46-51, 57-58 and 60-61 as

follows:

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2. (Amended) The transgenic plant [of] according to claim 1, wherein [the] said citrate synthase activity is reduced by inhibiting the expression of endogenous DNA sequences which code for citrate synthase.

3. (Amended) The transgenic plant [of] according to claim 2, wherein [the inhibition of expression] said inhibiting is achieved by the use of antisense RNA.

4. (Amended) The transgenic plant [of] according to claim 2, wherein [the inhibition of expression] said inhibiting is achieved by the use of ribozymes cleaving [specifically] specific RNA coding for citrate synthase.

5. (Amended) The transgenic plant [of any one of claims] according to claim 1 [to 4], which is a useful plant.

6. (Amended) A storage organ of [a] the plant [of] according to any one of claims 1 to 5 comprising cells with a reduced citrate synthase activity.

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17. (Amended) A vector comprising [a] the DNA molecule [of] according to
claim 71 [15 or 16].

20. (Amended) A bacterial cell, comprising [a] the DNA molecule [of]
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according to claim 71 [15 or 16] or [a] the vector according to [of] any one of claims 17 to
19.

21. (Amended) A process for inhibiting flower formation in [plants wherein]
a plant comprising the step of reducing the citrate synthase activity in the cells of said plant
[the plants is reduced].

22. (Amended) A process to improve the storage capability of storage organs
in [plants wherein] a plant comprising the step of reducing the citrate synthase activity in the
cells of said plant [the plants is reduced].

23. (Amended) A process for reducing the sprouting of tubers of a transgenic
tuberous [plants wherein] plant comprising the step of reducing the citrate synthase activity
in the cells of the tubers [is reduced].

24. (Amended) The process [of] according to any one of claims 21 to 23,
wherein the citrate synthase activity is reduced by inhibiting the expression of [DNA
sequences which code for] endogenous citrate synthase genes.

28. (Twice amended) The process [of any one of claims 25] according to claim 73 [26 or 60], wherein [the] said DNA sequence [transcribed into anti-sense RNA] comprises a nucleotide sequence selected from the group consisting of the nucleotide sequence [given in] of SEQ ID NO: 1, the nucleotide sequence of SEQ ID NO: 3, [or] the nucleotide sequence of SEQ ID NO: 5, a nucleotide sequence which is essentially identical to the nucleotide sequence of SEQ ID NO: 1, a nucleotide sequence which is essentially identical to the nucleotide sequence of SEQ ID NO: 3, a nucleotide sequence which is essentially identical to the nucleotide sequence of SEQ ID NO: 5, [or] a part [thereof] of the nucleotide sequence of SEQ ID NO: 1, a part of the nucleotide sequence of SEQ ID NO: 3, a part of the nucleotide sequence of SEQ ID NO: 5, [or derivatives thereof] a nucleotide sequence which [are] is derived by insertion, deletion or substitution from the nucleotide sequence of SEQ ID NO: 1, a nucleotide sequence which is derived by insertion, deletion or substitution from the nucleotide sequence of SEQ ID NO: 3, a nucleotide sequence which is derived by insertion, deletion or substitution from the nucleotide sequence of SEQ ID NO: 5, [of this sequence or] a [DNA] nucleotide sequence which shows a high degree of homology to [such a DNA sequence] the nucleotide sequence of SEQ ID NO: 1, a nucleotide sequence which shows a high degree of homology to the nucleotide sequence of SEQ ID NO: 3, and a nucleotide sequence which shows a high degree of homology to the nucleotide sequence of SEQ ID NO: 5; [or a part of such sequence]

wherein [the used DNA] said nucleotide sequence or said part thereof has a length and a degree of homology to an endogenous citrate synthase gene sufficient to elicit an antisense effect and thereby inhibit expression of said endogenous citrate synthase gene.

4.5
29. (Amended) The process of claim 24, wherein said inhibiting is performed
[the expression of DNA sequences which code for citrate synthase is inhibited] by use of
ribozymes.

4.6
39. (Twice amended) A method for [modifying] inhibiting the [flowering
behavior] flower formation of [plants] a plant using a DNA molecule [molecules] which
[code] codes for citrate synthase (EC No. 4.1.3.7.).

4.7
41. (Twice amended) [The] A method [according to claim 39 wherein the
flower formation is induced] for increasing flower formation of a plant using a DNA
molecule which codes for citrate synthase (EC No. 4.1.3.7.).

4.8
46. (Three times amended) The DNA molecule according to claim 61,
[which codes for a protein] wherein said coding region comprises [comprising] the amino
acid sequence [given in] of SEQ ID NO: 2 or an essentially identical amino acid sequence[,
said protein having citrate synthase activity].

47. (Three times amended) The DNA molecule according to claim 61,
[which codes for a protein] wherein said coding region comprises [comprising] the amino
acid sequence [given in] of SEQ ID NO: 4 or an essentially identical amino acid sequence[,
said protein having citrate synthase activity].

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48. (Three times amended) The DNA molecule according to claim 61, [which codes for a protein] wherein said coding region comprises [comprising] the amino acid sequence [given in] of SEQ ID NO: 6 or an essentially identical amino acid sequence[, said protein having citrate synthase activity].

49. (Amended) The DNA molecule according to claim 61, [which] wherein said coding region comprises the nucleotide sequence [given in SeqID No.] of SEQ ID NO: 1 or an essentially identical nucleotide sequence which codes for a protein having citrate synthase activity.

50. (Three times amended) The DNA molecule according to claim 61, [which] wherein said coding region comprises the nucleotide sequence [given in] of SEQ ID NO: 5 or an essentially identical nucleotide sequence which codes for a protein having citrate synthase activity.

51. (Three times amended) The DNA molecule according to claim 61, [which] wherein said coding region comprises the nucleotide sequence [given in] of SEQ ID NO: 3 or an essentially identical nucleotide sequence which codes for a protein having citrate synthase activity.

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56. (Twice amended) A bacterial cell comprising the DNA molecule of any one of claims 43 to 51 or 61, a plasmid comprising the DNA molecule, or the plasmid of any one of claims [52] 53 to 55.

In claim 57, before "comprising," please add --further--.

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58. (Twice amended) A method for preventing the synthesis of an endogenous citrate synthase in a plant cell comprising [using] introducing into the plant cell the DNA molecule according to any one of claims 43 to 51 or 61 and expressing from said DNA molecule [to express a not-translatable mRNA] non-translatable RNA.

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60. (Amended) The process [of claim 25 or 26] according to claim 73, wherein [the] said DNA sequence [transcribed into anti-sense RNA] comprises a nucleotide sequence which is complementary to a nucleotide sequence that codes [in sense orientation] for a protein [having] comprising an amino acid sequence selected from the group consisting of the amino acid sequence [given in] of SEQ ID NO: 2, the amino acid sequence of SEQ ID NO: 4, and the amino acid sequence of [or] SEQ ID NO: 6; [or a DNA sequence which shows a high degree of homology to such a DNA sequence or a part of such sequence]

wherein [the used DNA] said nucleotide sequence [or part thereof] has a length and a degree of homology to an endogenous citrate synthase gene sufficient to elicit an antisense effect and thereby inhibit expression of said endogenous citrate synthase gene.

61. (Amended) A DNA molecule [of a plant of the *Solanaceae* family or the *Chenopodiaceae* family which comprises] comprising

- GI1
- (i) [the] a coding region for a citrate synthase of a plant of the *Solanaceae* family or the *Chenopodiaceae* family (EC No. 4.1.3.7.)₁ [;
operably linked to
 - (ii) elements suitable for controlling the transcription of said coding region; wherein said DNA molecule, when integrated into the genome of a cell of a plant, is transcribed to yield RNA [characterized in that the information in the nucleotide sequence permits, upon integration into a plant genome, the formation of transcripts through] which suppresses the activity of an endogenous citrate synthase in said cell of a plant [activity can be suppressed, or permits the formation of transcripts by which the citrate synthase activity in the cells can be increased].

~~Add the following claims 62-73.~~

GI2
62. The transgenic plant according to claim 1, which comprises a recombinant DNA comprising the following constituents:

- (a) a promoter functional in plants; and
- (b) a DNA sequence coding for citrate synthase;

wherein said DNA sequence is fused to said promoter in antisense orientation so that the non-coding strand of said DNA sequence is transcribed.

63. The transgenic plant according to claim 62, wherein said citrate synthase comprises the amino acid sequence of SEQ ID NO: 2 or an essentially identical amino acid sequence.

64. The transgenic plant according to claim 62, wherein said citrate synthase comprises the amino acid sequence of SEQ ID NO: 4 or an essentially identical amino acid sequence.

65. The transgenic plant according to claim 62, wherein said citrate synthase comprises the amino acid sequence of SEQ ID NO: 6 or an essentially identical amino acid sequence.

66. The transgenic plant according to claim 62, wherein said DNA sequence comprises the nucleotide sequence of SEQ ID NO: 1 or an essentially identical nucleotide sequence which codes for a protein having citrate synthase activity.

67. The transgenic plant according to claim 62, wherein said DNA sequence comprises the nucleotide sequence of SEQ ID NO: 3 or an essentially identical nucleotide sequence which codes for a protein having citrate synthase activity.

68. The transgenic plant according to claim 62, wherein said DNA sequence comprises the nucleotide sequence of SEQ ID NO: 5 or an essentially identical nucleotide sequence which codes for a protein having citrate synthase activity.

69. A seed of the transgenic plant according to any one of claims 1 to 5.

70. A seed according to the transgenic plant of any of claims 62 to 68.

71. A recombinant double-stranded DNA molecule comprising the following constituents:

- (i) a promoter functional in plants; and
- (ii) a DNA sequence coding for a citrate synthase, wherein said DNA sequence is fused to said promoter in antisense orientation so that the non-coding strand of said DNA sequence is transcribed.

72. The process according to claim 24, wherein the expression of said endogenous citrate synthase genes is inhibited by expressing anti-sense RNA.

73. The process according to claim 72, comprising the steps of